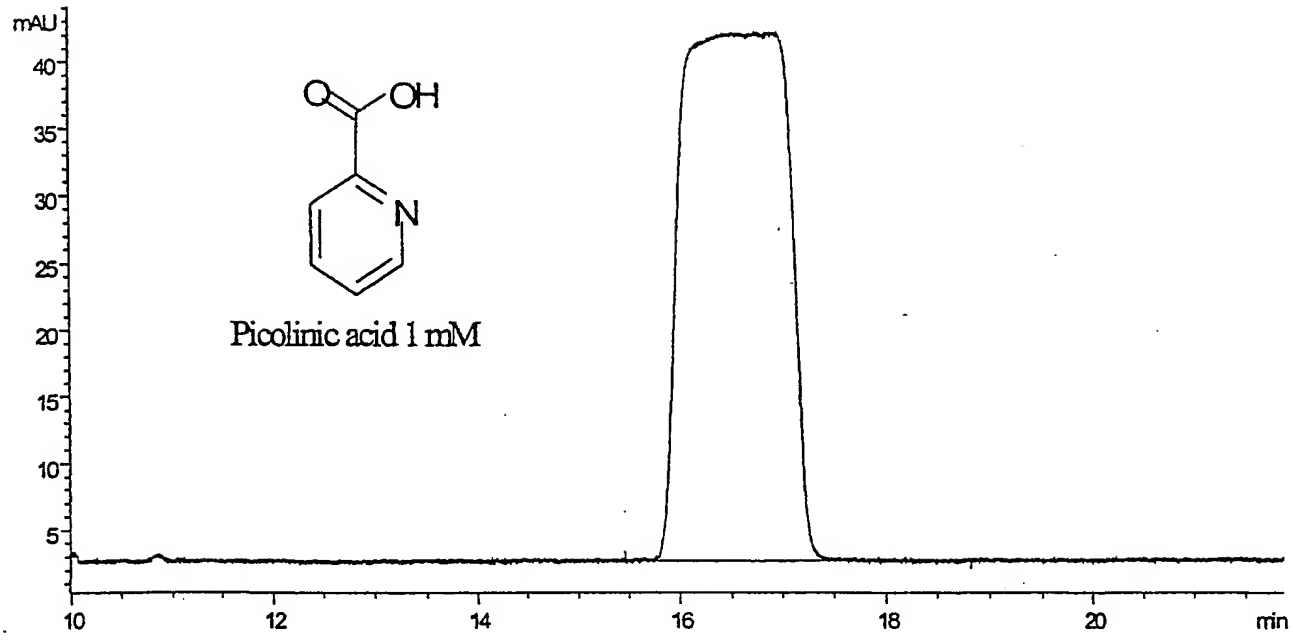

Figure 1: analysis conditions: fused silica capillary ϕ = 50 µm, L_{tot} = 60 cm, 50 mM borate buffer, pH = 9.0, + 15 kV, T = 20°C, λ = 210 nm.

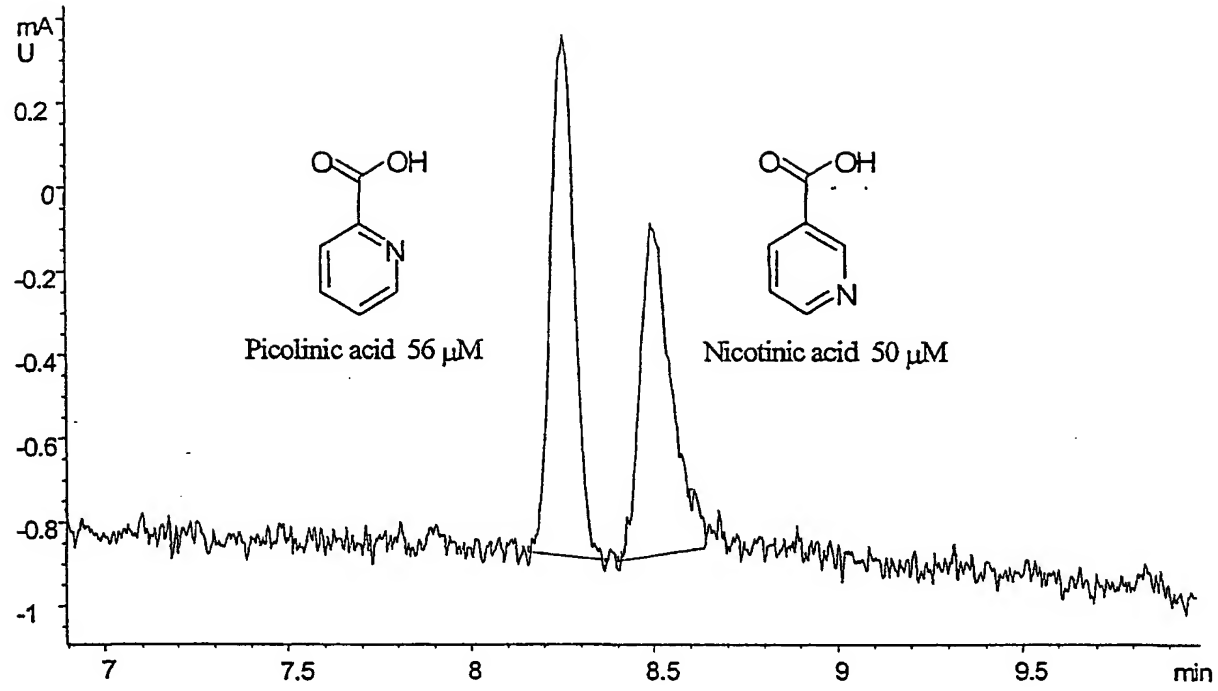

Figure 2: analysis conditions: fused silica capillary, pre-treated for 5 min with a 1 mM solution of compound (1), $\phi = 50$ µm, $L_{tot.} = 60$ cm, 25 mM borate buffer, pH = 9.0, -20 kV, T = 20°C, $\lambda = 210$ nm.

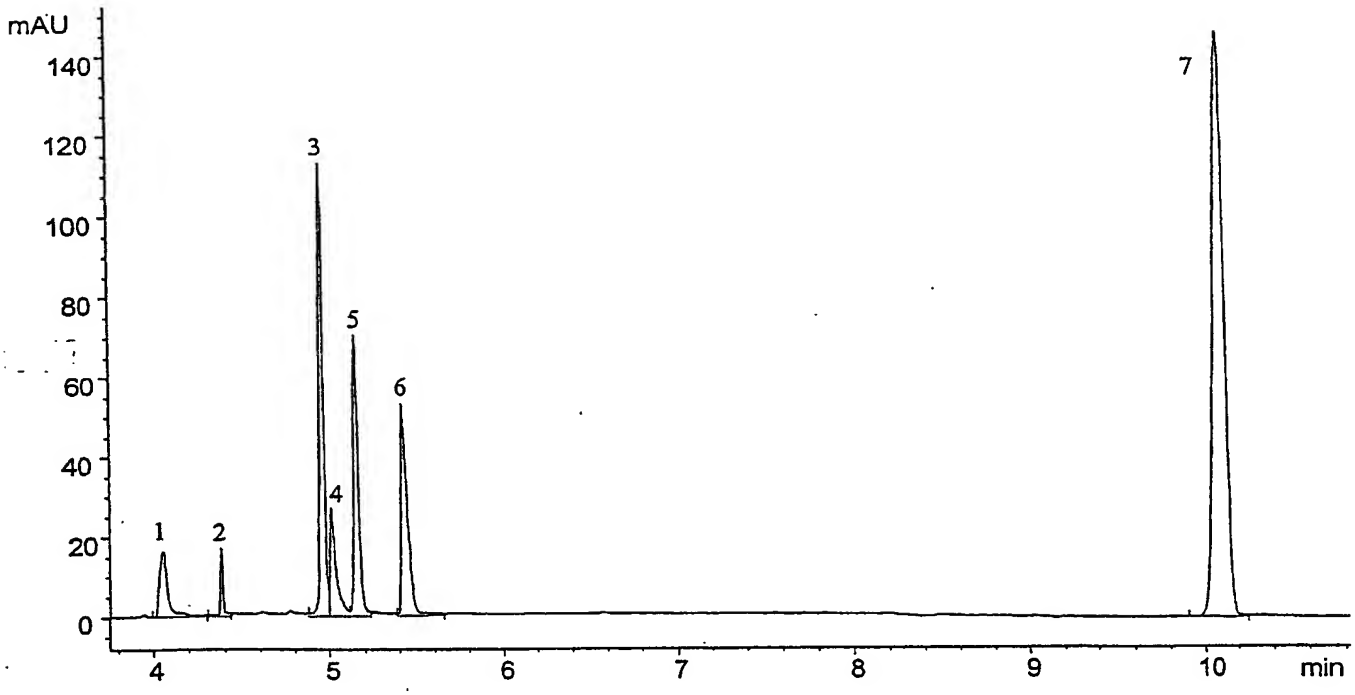

Figure 3: analysis conditions: fused silica capillary, $\phi = 50$ µm, $L_{tot.} = 60$ cm, 25 mM borate buffer, pH = 8.5, - 20 kV, T = 20°C, $\lambda = 210$ nm. Analyte concentration: 0.2 mg/ml.

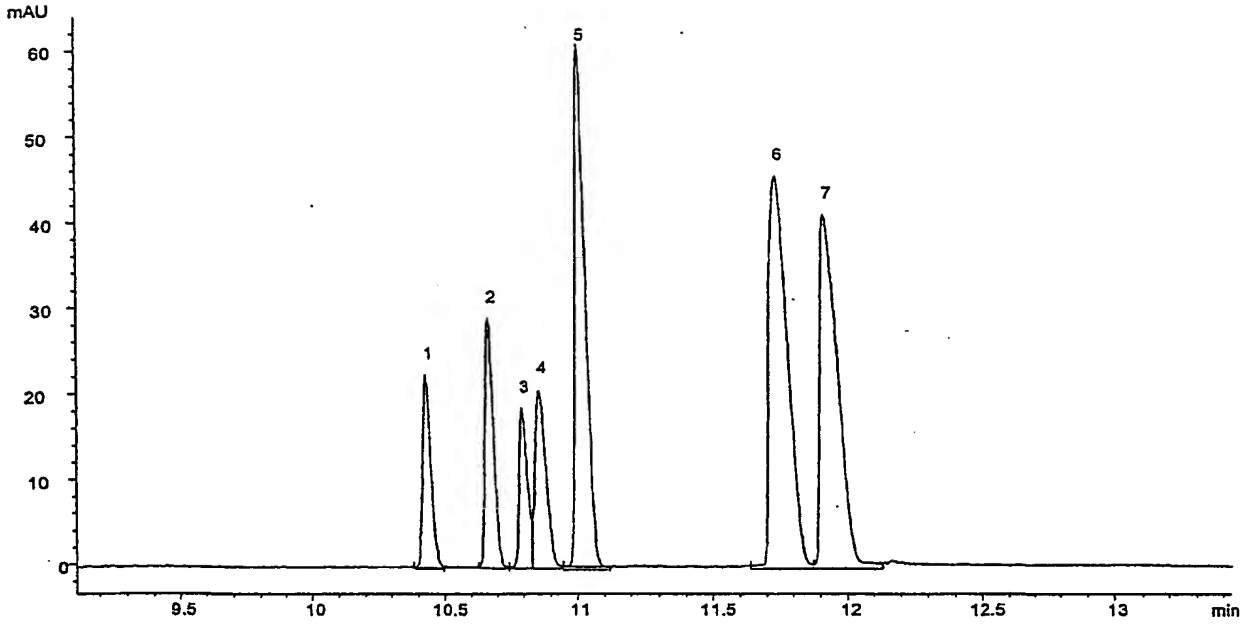

Figure 4: analysis conditions: fused silica capillary ϕ = 50 µm, $L_{tot.}$ = 100 cm, 25 mM borate buffer, pH = 8.5, - 25 kV, T = 25°C, λ = 210 nm. Analyte concentration: 0.14 mg/ml.

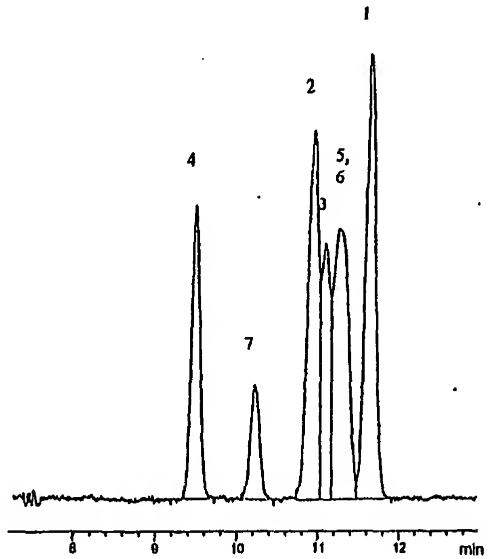

Figure 5A: analysis conditions: uncoated fused silica capillary $\phi = 50$ µm, $L_{tot.} = 50$ cm, 25 mM borate buffer, pH = 9, + 15 kV, T = 25°C, $\lambda = 210$ nm.i

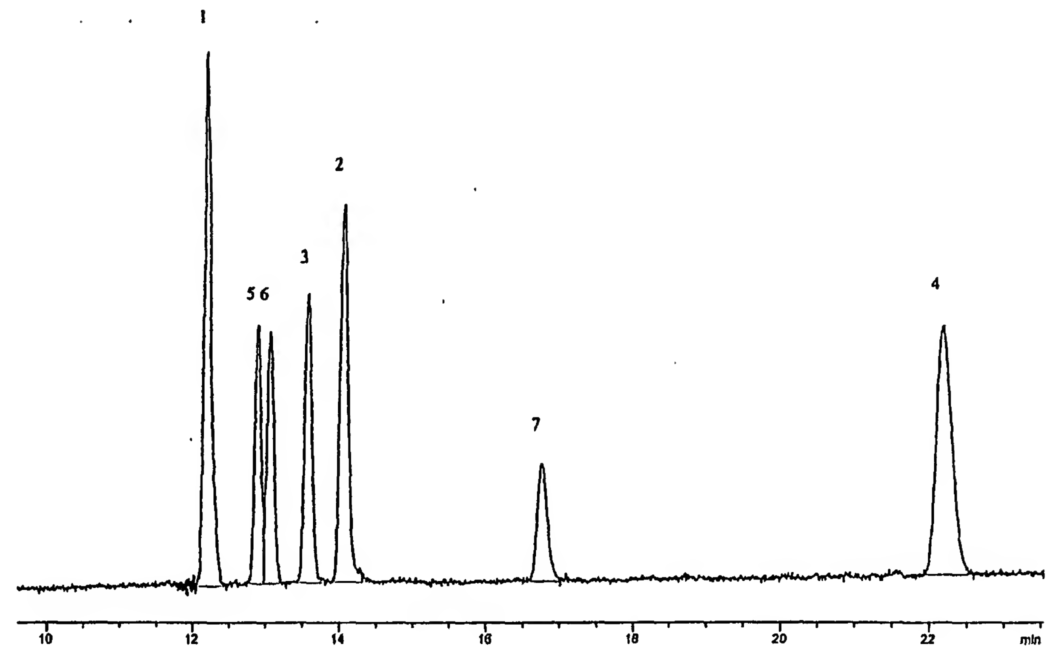

Figure 5B: analysis conditions: fused silica capillary $\phi = 50$ µm, $L_{tot.} = 50$ cm, 25 mM borate buffer, pH = 9, - 25 kV, T = 25°C, $\lambda = 210$ nm.

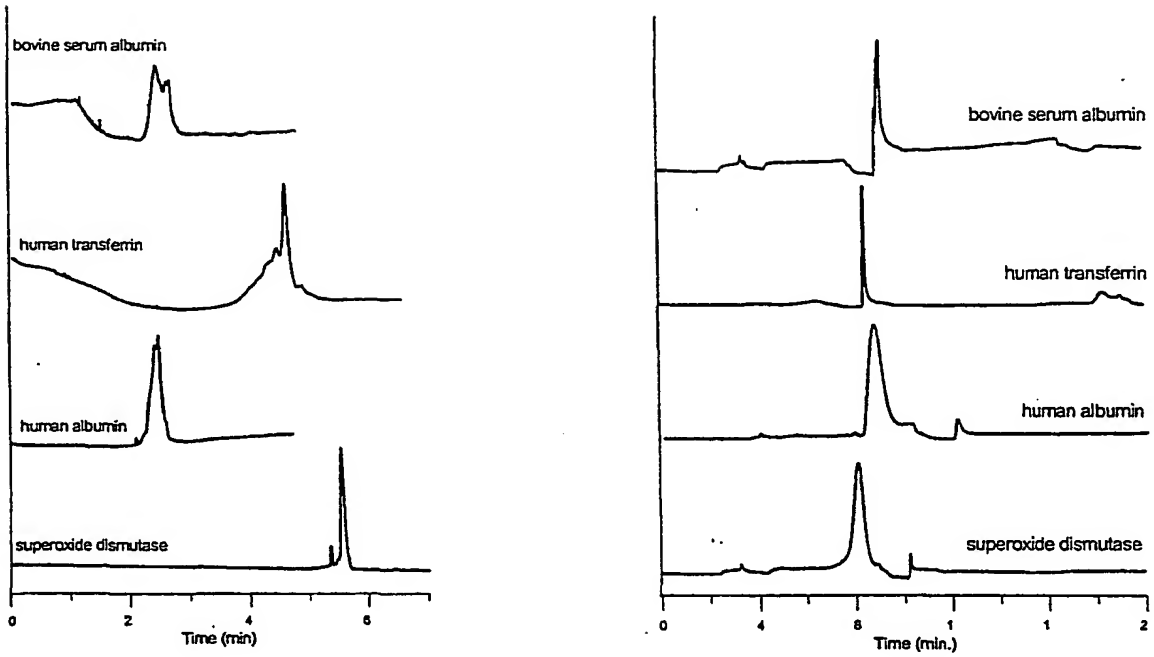

Figure 6: Separation of a number of protein markers, injected in a covalently coated (left) and in a **Q-PzI** treated (right) capillary, respectively. Capillary length 37 cm, 50 µm i.d.. Separation conditions were: run at 200 V/cm, sample injection by pressure for 2 sec, 5 psi/s, detection at 214 nm. In both cases the running buffer was 25 Mm Na tetraborate, Ph 9.0.

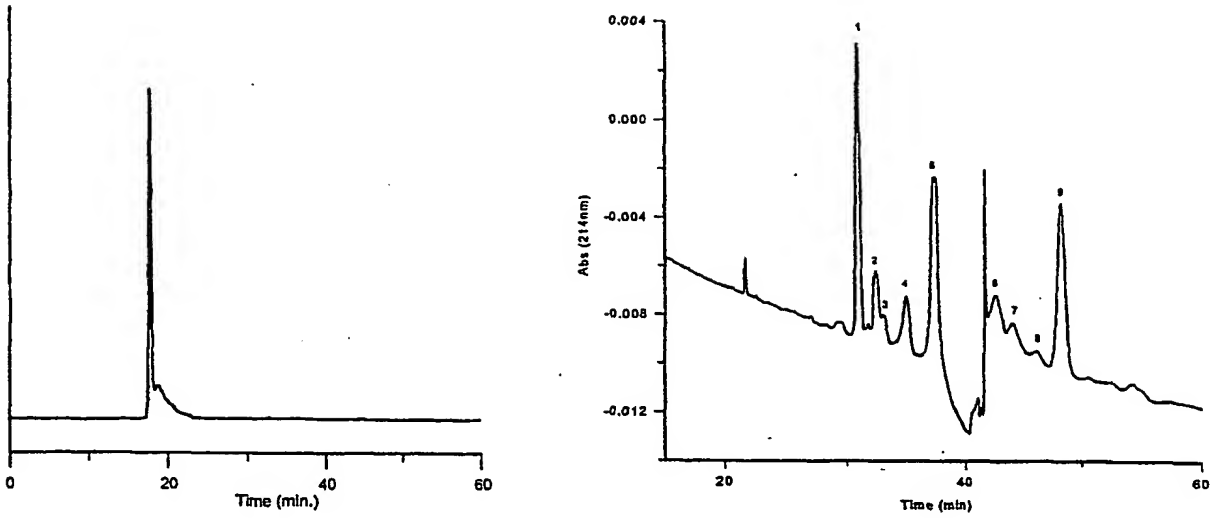

Figure 7: Separation of protein mixture with Pi ranging from Ph 3-10 (right) with **QpzI** treated capillary 77 cm long, 50 μm i.d.; (left) covalently coated capillary , 77 cm long, 50μ m, i.d..

Separation conditions: 250V/cm, sample injection by pressure for 5 sec, running in tetraborate buffer Ph 9.0.(1) Horse myoglobin, (2) bovine carbonicanhydrase B, (3) human carbonicanhydrase B, (4) β-lactoglobulin A, (5) soybean trypsin inhibitor, (6) lentil-lectin Pi 8.15 (7) lentil-lectin Pi 8.55, (8) lentil-lectin Pi 8.65, (9) trypsinogen

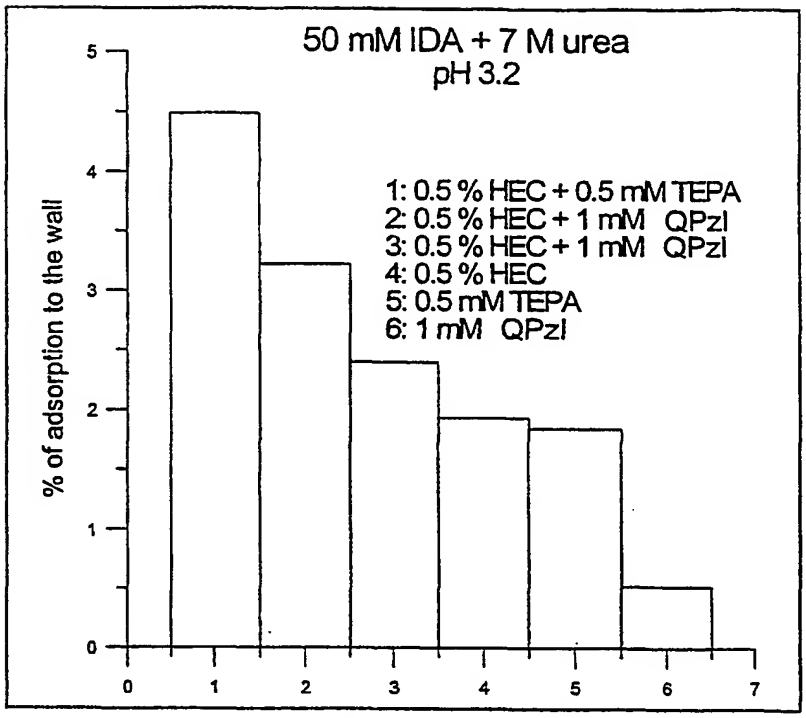

Figure 8: inhibition ability of different additives to the binding of proteins to the silica wall. The electrophoretic runs have been performed in 50 Mm IDA buffer, in presence of 8 M urea (apparent Ph of 3.2) in Waters Quanta 4000E instrument, in a 27-cm-long uncoated capillary, 50 μm ID. Sample: mixture of α and β human globin chains, 2 mg/Ml. After 10 consecutive runs, the adsorbed proteins are eluted electrophoretically in 25 Mm phosphate buffer, Ph 7, containing 60 Mm SDS and detected at 210 nm.

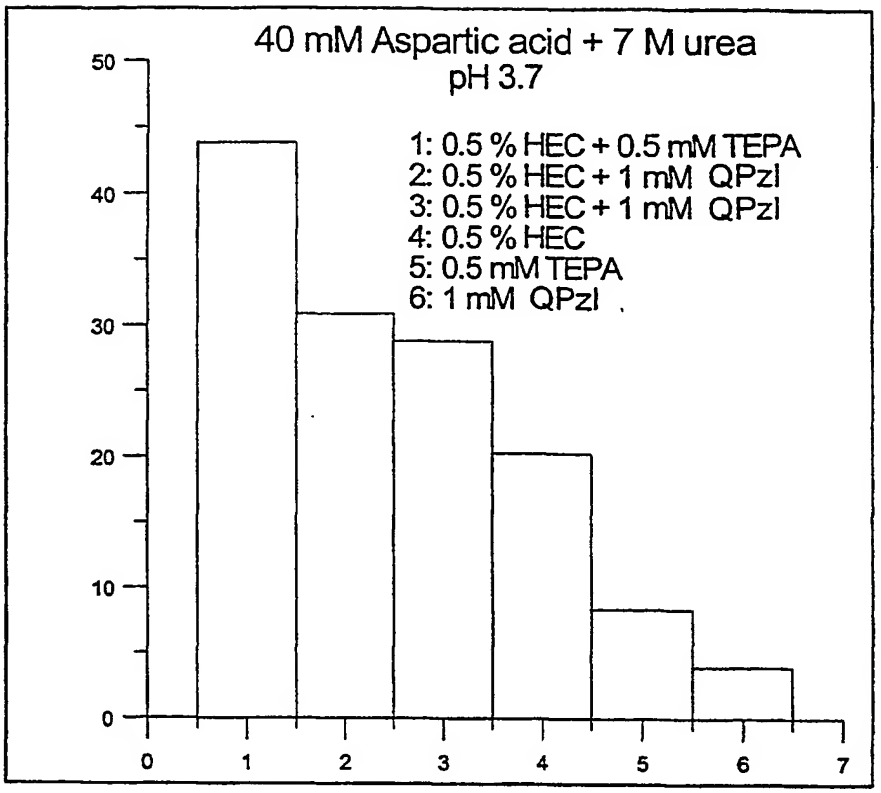

Figure 9: inhibition capability of various additives toward the adsorption of proteins to the silica wall. The electrophoretic runs have been executed in 50 mM Asp buffer in presence of 8 M urea (apparent pH 3.8) in a Waters Quanta 4000E instrument, in 27-cm-long, uncoated capillary, 50 μm ID. Buffer: a mixture of α e β human globin chains, 2 mg/mL. After 10 consecutive runs, the adsorbed proteins are eluted electrophoretically in 25 mM phosphate buffer, pH 7, containing 60 mM SDS and detected at 210 nm.